

ABSTRACT

A method and an apparatus for cleaning (e.g., removing etch by-products from) an etched target are disclosed. The method comprises providing a cleaning solution at a predetermined temperature lower than room temperature and cleaning the etched target with the cleaning solution. The apparatus for cleaning semiconductor devices comprises a chuck on which a semiconductor substrate is mounted; a solution storage part for storing a cleaning solution; a solution supply part for supplying the semiconductor substrate with the cleaning solution; a heat exchange part for maintaining the cleaning solution at a temperature lower than room temperature; and a control part for controlling the chuck rotation for a predetermined time and the cleaning solution delivery from the heat exchange part to the semiconductor substrate via the solution supply part. Accordingly, the present invention provides a more precise lateral profile of an etched pattern from the etch by-product cleaning process.